

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 030504WO	FOR FURTHER ACTION		See item 4 below
International application No. PCT/US2005/003587	International filing date (<i>day/month/year</i>) 04 February 2005 (04.02.2005)	Priority date (<i>day/month/year</i>) 05 February 2004 (05.02.2004)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant QUALCOMM Incorporated			

- This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).
- This REPORT consists of a total of 12 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.
- This report contains indications relating to the following items:

<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input checked="" type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input checked="" type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input checked="" type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input type="checkbox"/> Box No. VIII	Certain observations on the international application
- The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Date of issuance of this report 07 August 2006 (07.08.2006)
	Authorized officer Beate Giffo-Schmitt e-mail: pt03@wipo.int

PATENT COOPERATION TREATY

REC'D 30 AUG 2005

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From the
INTERNATIONAL SEARCHING AUTHORITY

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To:

see form PCT/ISA/220

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/US2005/003587

International filing date (day/month/year)
04.02.2005

Priority date (day/month/year)
05.02.2004

International Patent Classification (IPC) or both national classification and IPC
H04Q7/22, H04Q7/32

Applicant
QUALCOMM Incorporated

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office
D-50238 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epru d
Fax: +49 89 2399 - 4465

Authorized Officer

Byee, N

Telephone No. +49 89 2399-2608



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2005/003587

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

Box No. II Priority

1. ☒ The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43bis.1 and 64.1) is the claimed priority date.
2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2005/003587

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has:
- ☒ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☐ not paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
- ☐ complied with
 - ☒ not complied with for the following reasons:
see separate sheet
4. Consequently, this report has been established in respect of the following parts of the international application:
- ☒ all parts.
 - ☐ the parts relating to claims Nos.

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-28
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-28
Industrial applicability (IA)	Yes: Claims	1-28
	No: Claims	

2. Citations and explanations

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2005/003587

Box No. VI Certain documents cited

1. Certain published documents (Rules 43*bis*.1 and 70.10)
and /or
2. Non-written disclosures (Rules 43*bis*.1 and 70.9)
see form 210

A. Non-Unity explanations made in respect of paragraph IV:

The present application does not comply with the requirements of unity of the invention as set forth in the PCT regulations (Article 34(3), Rule 13 PCT).

The separate inventions included in the present application are:

- 1) **Claims 1 to 22:** defining a **composite set of parameters** for broadcast services and **mapping parameters** of broadcast messages received from **different** wireless communication **systems** to said set of parameters in order to **provide transparent broadcast services** in a **multi-mode wireless device**.
- 2) **Claims 23 to 28:** defining sets of at least one **broadcast service** and receiving on a **time base** messages of said **broadcast service** in a wireless device.

Since the common features of said group of inventions (independent claims 1, 14, 19, 22 and independent claims 23, 27) are represented merely by the general and well known concept of receiving broadcast services in a wireless device (see e.g. document **D1** in paragraph **B.** below), they do not comply with the requirements of unity of the invention, as set forth in the PCT regulations (Article 34 (3), Rule 13.1 PCT), because there is no single general inventive concept linking these two inventions in terms of the same or corresponding special technical features in the sense of Rule 13.2 PCT.

B. Citations and explanations made in respect of paragraph V:

Reference is made to the following documents:

D1: US2003/0224814 A1
D2: US2002/0152220 A1
D3: US2002/0135462 A1
D4: GB-A-2 382 683

1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 and independent claims 14, 19, 22, 23 and 27 does not involve an inventive step in the sense of Article 33(3) PCT.

- 1.1 Claim 1 does not involve an inventive step, Article 33(1) PCT, because,

document **D1** (see in particular abstract; page 1, paragraphs [0003] to [0011]; page 1, paragraph [0015] to page 2, paragraph [0025]; page 3, paragraphs [0027] to [0032]; figure 1) discloses, according to the **essential** features of **claim 1** (the references in parentheses relate to information from document **D1**), a wireless device (see in particular "103" in figure 1) comprising:

a first module operable to process a first broadcast message for a first wireless communication system in accordance with parameters of the first broadcast message (see in particular page 2, paragraph [0020], lines 1 to 8; page 3, paragraph [0032], lines 3 to 5);

a second module operable to process a second broadcast message for a second wireless communication system in accordance with parameters of the second broadcast message (see in particular page 2, paragraph [0020], lines 10 to 14; page 3, paragraph [0032], lines 3 to 5); and

a third module operable to **display** the first and second broadcast messages **transparently on a common interface** defined for broadcast services (see in particular page 1, paragraphs [0004] to [0009]; page 3, paragraph [0031], lines 1 to 4 and paragraph [0032], lines 12 to 16).

The subject-matter of **claim 1** differs from that disclosed in document **D1** merely in that the **parameters** of the first and second **broadcast messages** are **mapped** by the third module **to corresponding parameters** in a **set of parameters** defined for broadcast services.

It would be immediately apparent to the person skilled in the art that the teaching of document **D1** is incomplete because, although **D1** discloses means to display different types of received broadcast messages on one common interface transparently and independently to their original formats and parameters (see in particular page 2, paragraph [0020], lines 1 to 4; page 3, paragraph [0031], lines 1 to 4), **D1** does not provide any teaching on how to achieve said common display.

The objective technical problem related to document **D1** is regarded as how to display, on one common interface of a wireless device, received messages having different formats and parameters, independently to their original formats.

The skilled person, wishing to find a solution to overcome this problem, **would**, in consulting the prior art in the general field of management/display of different types of received messages in a wireless device, come across document **D2** which describes a wireless device having means to **map** the **parameters** of the first and second **messages to corresponding parameters** in a **set of parameters** defined for **message services** display (see in particular page 1, paragraphs [0009] and [0010]; page 2, paragraphs [0027] to [0033] and paragraph [0034], lines 1 and 2).

Therefore, starting from the method described in document **D1** and wishing to complete the teaching of **D1** in respect of the display of broadcast messages on one common interface independently to their formats, the skilled person **would arrive**, by simply applying the principle of the solution disclosed in document **D2** (ie. **map the parameters of the messages to corresponding parameters in a set of parameters** defined for **messages** display) to the wireless device of document **D1**, without the exercise of inventive skill, at the wireless device corresponding to the subject-matter of claim 1.

Therefore, the subject-matter of claim 1 does **not** meet the criteria of Article 33 (1)

PCT.

- 1.2 The same considerations as made in above paragraph 1.1 regarding lack of inventive step (Article 33 (3) PCT) of claim 1 are also valid for **independent claims 14, 19 and 22** since said claims are based on the same feature combination as claim 1 in terms of a method (claim 14), an apparatus (claim 19) and a processor readable media (claim 22) storing instructions for performing the process and mapping steps operated in the wireless device (claim 1).

The subject-matter of independent **claims 14, 19 and 22** therefore does **not** involve an **inventive** step in the sense of Article 33 (3) PCT, and thus, the criteria of Article 33 (1) PCT are not met.

- 1.3 Independent claim 23 does not involve an inventive step, Article 33(1) PCT, because, document **D3** (see in particular abstract; page 1, paragraphs [0003] to [0008], [0016]; page 2, paragraph [0026] to page 4, paragraph [0045]; page 5, paragraphs [0049] to [0051]) discloses, according to the **essential** features of **claim 23** (the references in parentheses relate to information from document **D3**), a method of receiving **message** services in a wireless communication system (see in particular page 1, paragraphs [0005] and [0007]), comprising:
- defining a first set of at least one **message** service supported by the system (see in particular page 2, paragraph [0020]);
 - associating the first set with a first active time period indicative of when **messages** for the at least one **message** service in the first set are to be received (see in particular page 1, paragraphs [0006] and [0016]); and
 - receiving **messages** for the at least one **message** service in the first set during the first active time period (see in particular page 1, paragraph [0007]; page 2, paragraph [0026]; page 3, paragraphs [0030] to [0036]).

The subject-matter of **claim 1** differs from that disclosed in document **D3** merely in that the messages are **broadcast** messages of **broadcast** services.

However, this distinguishing feature (use of **broadcast** services for transmitting messages to a plurality of mobile devices) represents a simple design detail which is

obvious and well known to the skilled persons, as shows for example a similar method disclosed in document **D4** (see in particular page 1, line 18 to page 2, line 22; page 3, line 24 to page 10, line 26; page 12, line 7 to page 13, line 2) wherein messages are sent to a plurality of mobile devices as **broadcast** messages (of **broadcast** services).

The skilled person, being aware of the method described in document **D3** and wishing to provide further technical detail in respect of provision of messages to a plurality of mobile devices, **would** therefore arrive, by applying a normal and obvious design detail (ie. transmitting messages using **broadcast** services) to the method of document **D3**, **without** the exercise of inventive skill, at the method corresponding to the subject-matter of claim 23.

The claim 23 is therefore does **not** meet the requirements of Articles 33 (1) PCT.

- 1.4 The same considerations as made above in paragraph 1.3 regarding lack of inventive step (Article 33 (3) PCT) of independent claim 23 are also valid for **independent claim 27** since said claim is based on the same feature combination as claim 23 in terms of a wireless device having means operative to perform the method of claim 23.

Independent **claim 27** therefore does **not** meet the requirements of Article 33 (1) PCT.

2. The **dependent claims 2 to 13, 15 to 18, 20, 21, 24 to 26 and 28** do not contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT with respect to inventive step (Article 33 (3) PCT) because said features are **either** derivable from the previously cited documents (for the independent claim to which they refer), represent merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, **or** represent design details. Namely:

the additional features of **claims 2, 4, 15, 16 and 20** are design details disclosed in

or implicitly derivable from document **D1** (see in particular page 2, paragraph [0020]; page 3, paragraph [0032], lines 12 to 16),

the additional features of **claims 3, 5 to 11, 17 and 18** are derivable from the disclosure of documents **D1** (see in particular page 1, paragraphs [0004] to [0009]; page 3, paragraph [0031], lines 1 to 4 and paragraph [0032], lines 12 to 16) **and D2** (see in particular page 1, paragraphs [0009] and [0010]; page 2, paragraphs [0027] to [0033] and paragraph [0034], lines 1 and 2),

the additional features of **claims 12, 13, 17 and 21** represent merely one of the straightforward solutions that the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, for filtering the different types of broadcast messages received with the method disclosed in **D1**,

the additional features of **claims 24 to 26 and 28** are disclosed in or implicitly derivable from document **D3** (see citations in above paragraph 1.3) **or** represent (**claim 25**) simple design details.

Due to the above reasons, the subject-matter of dependent **claims 2 to 13, 15 to 18, 20, 21, 24 to 26 and 28** does not involve an inventive step in the sense of Article 33 (3) PCT.

C. Additional remarks concerning the form and contents of the application:

1. The documents **D1, D2 and D3** are not identified in the description and the relevant background art disclosed therein is not briefly discussed, Rule 5.1 (a) (ii) PCT.
2. **Claims 1, 14, 19 and 22** are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document **D1**) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).
3. The claims (preamble and characterising portion) do not contain reference signs

placed in parentheses, Rule 6.2(b) PCT.

D. Additional remarks concerning the clarity of the claims:

1. Although **claims 1 and 19** have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought and in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.
2. The vague and imprecise statement "**spirit**" in the description on page 24, paragraph [1084], line 5 implies that the subject-matter for which protection is sought may be different to that defined by the claims, thereby resulting in lack of clarity (Article 6 PCT) when used to interpret them.
3. **Claims 2 and 15** do not meet the requirements of Article 6 PCT because, the expressions in brackets (eg. (CBS), (GSM)), used in said claims, do not correspond to reference signs in the sense of Rule 6.2(b) PCT.

E. Certain documents cited in respect of paragraph VI:

1. US2004/0137955: "Unified message box for wireless mobile communication devices"
Publication date: 15/07/2004 (before the filing date and after the claimed priority date of the present application).
2. WO 2004/012470 A1: "Filtering of broadcast SMS messages"
Publication date: 05/02/2004 (before the filing date and at the claimed priority date of the present application).